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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in

the application:

**Listing of Claims:** 

1. (original) A vehicle wheel balancer for obtaining data relative to the imbalance of a

vehicle wheel, said wheel balancer comprising:

(a) a centering shaft having a free end adapted for extending through a

center hole of the wheel, and a proximal end opposite the free end;

(b) means for rotating said centering shaft;

(c) a locating hub carried on said shaft and adapted for engaging a first side

of the wheel to locate the wheel on said balancer;

(d) a centering sleeve carried on said shaft adjacent said locating hub, and

adapted for extending through the center hole of the wheel to center the wheel relative

to said shaft:

(e) means for locking said centering sleeve to said wheel balancer, such that

said centering sleeve remains secured to said wheel balancer upon removal of the

wheel from said shaft; and

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(f) a mounting member carried on said shaft and adapted for engaging a second side of the wheel, the wheel being sandwiched between said mounting member and said locating hub such that said mounting member, locating hub, and centering sleeve cooperate to secure the wheel in a centered position relative to said shaft during wheel-balancing rotation of the wheel.

- 2. (original) A vehicle wheel balancer according to claim 1, wherein said locating hub comprises an annular face plate adapted for engaging the wheel, and an integrally-formed cup defining an internal cavity for receiving a portion of said centering sleeve.
- 3. (original) A vehicle wheel balancer according to claim 2, and comprising a spring positioned within the cavity of said locating hub, and adapted for urging said centering sleeve into the center hole of the wheel.

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4. (original) A vehicle wheel balancer according to claim 3, and comprising a floating

spring cover movable within the cavity of said locating hub and residing between said

spring and centering sleeve.

5. (original) A vehicle wheel balancer according to claim 4, wherein said means for

locking said centering sleeve to said wheel balancer comprises a locking bolt extending

outwardly from said centering sleeve towards said floating spring cover, and wherein

said floating spring cover defines an opening therein for receiving and holding a free

end of said locking bolt to secure said centering sleeve to said wheel balancer.

6. (original) A vehicle wheel balancer according to claim 5, wherein said locking bolt

comprises an enlarged head, and wherein the opening in said floating spring cover

comprises an enlarged portion adapted for receiving the head of said bolt therethrough

and a narrow portion communicating with the enlarged portion, whereby after inserting

the bolt head through the enlarged portion of said opening, said centering sleeve is

rotated to locate the bolt head along the narrow portion of said opening such that said

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bolt head engages said floating spring cover to lock said centering sleeve to said wheel

balancer.

7. (original) A vehicle wheel balancer according to claim 1, wherein the free end of

said centering shaft comprises an external screw thread.

8. (original) A vehicle wheel balancer according to claim 7, and comprising a wing nut

applied to the free end of said centering shaft, and having a complementary internal

screw thread mating with the external thread of said centering shaft to releasably

secure the wheel between said locating hub and mounting member.

9. (original) A wheel centering assembly for a vehicle wheel balancer adapted for

obtaining data relative to the imbalance of a vehicle wheel, said wheel centering

assembly comprising:

a centering shaft having a free end adapted for extending through a (a)

center hole of the wheel, and a proximal end opposite the free end;

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(b) a locating hub carried on said shaft and adapted for engaging a first side

of the wheel to locate the wheel on said balancer;

(c) a centering sleeve carried on said shaft adjacent said locating hub, and

adapted for extending through the center hole of the wheel to center the wheel relative

to said shaft;

(d) means for locking said centering sleeve to said wheel balancer, such that

said centering sleeve remains secured to said wheel balancer upon removal of the

wheel from said shaft; and

(e) a mounting member carried on said shaft and adapted for engaging a

second side of the wheel, the wheel being sandwiched between said mounting member

and said locating hub such that said mounting member, locating hub, and centering

sleeve cooperate to secure the wheel in a centered position relative to said shaft during

wheel-balancing rotation of the wheel.

10. (original) A wheel centering assembly according to claim 9, wherein said locating

hub comprises an annular face plate adapted for engaging the wheel, and an integrally-

formed cup defining an internal cavity for receiving a portion of said centering sleeve.

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11. (original) A wheel centering assembly according to claim 10, and comprising a

spring positioned within the cavity of said locating hub, and adapted for urging said

centering sleeve into the center hole of the wheel.

12. (original) A wheel centering assembly according to claim 11, and comprising a

floating spring cover movable within the cavity of said locating hub and residing

between said spring and centering sleeve.

13. (original) A wheel centering assembly according to claim 12, wherein said means

for locking said centering sleeve to said wheel balancer comprises a locking bolt

extending outwardly from said centering sleeve towards said floating spring cover, and

wherein said floating spring cover defines an opening therein for receiving and holding

a free end of said locking bolt to secure said centering sleeve to said wheel balancer.

14. (original) A wheel centering assembly according to claim 13, wherein said locking

bolt comprises an enlarged head, and wherein the opening in said floating spring cover

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comprises an enlarged portion adapted for receiving the head of said bolt therethrough,

and a narrow portion communicating with the enlarged portion, whereby after inserting

the bolt head through the enlarged portion of said opening, said centering sleeve is

rotated to locate the bolt head along the narrow portion of said opening such that said

bolt head engages said floating spring cover to lock said centering sleeve to said wheel

balancer.

15. (original) A wheel centering assembly according to claim 9, wherein the free end of

said centering shaft comprises an external screw thread.

16. (original) A wheel centering assembly according to claim 15, and comprises a wing

nut applied to the free end of said centering shaft, and having a complementary internal

screw thread mating with the external thread of said centering shaft to releasably

secure the wheel between said locating hub and mounting member.

17. (original) A centering sleeve adapted for extending through a center hole of a

vehicle wheel mounted on a vehicle wheel balancer to center the wheel relative to a

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rotatable balancer shaft, said centering sleeve comprising means for locking said

sleeve to the wheel balancer, such that said sleeve remains secured to the wheel

balancer upon removal of the wheel from the balancer shaft.

18. (original) A centering sleeve according to claim 17, and comprising an enlarged

base adapted for engaging a floating spring cover movable within a cavity defined by a

locating hub of the wheel balancer.

19. (original) A centering sleeve according to claim 18, wherein said means for locking

said centering sleeve to the wheel balancer comprises a locking bolt extending

outwardly from said base, and adapted for being inserted and held within an opening

formed with the floating spring cover to secure said centering sleeve to the wheel

balancer.

20. (cancelled)

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